The longitudinal muscles are slightly pleated, the transverse muscles not at all. There is a special muscular cord on the same side as the transverse muscle, which extends close to the wall, becomes broader as it runs downwards, and is homologous in position with the parietobasilar muscle of other Actiniæ. Further, it appears to me that all the septa reach the œsophagus, are all furnished with reproductive organs (in the present instance with testes), and have all a small perioral and a very large marginal opening (fig. 12). Unfortunately I could not decide this point with any certainty, as only a few septa, such as that given in fig. 12, could be dissected out; most of them were sticking together so that the mode in which the reproductive organs were distributed on the septa was never clearly seen in transverse sections.

Tribe III. MONAULE Æ.

Actiniaria with paired septa, but with only one pair of directive septa.

The Monauleæ form the third and last group in which the paired arrangement of the septa is distinctly pronounced, and therefore come nearer to the Hexactiniæ and Paractiniæ than the Zoantheæ and Ceriantheæ. It is remarkable that there is only one pair of directive septa, a fact which may perhaps be explained by the obliteration of the second pair.

From the absence of the second pair of directive septa, it follows that the body is exactly bilaterally symmetrical, as it is divided into symmetrical halves by only one divisional plane which runs through the intraseptal space of the directive septa. This divisional plane passes through an interseptal space on the opposite side, and divides the remaining pairs of septa equally, half lying on its right and half on its left. The whole number of the pairs of septa is consequently unequal.

There is only one esophageal groove, caused by the marked shortness of the directive septa, and on account of this I have chosen the name Monauleæ (αὐλός, a groove or tube). This groove was not very distinct, however, in transverse sections in the species examined; it would probably come out more clearly if looked at from the surface.

As I only know one species, it would be little to the purpose to give special diagnoses for the family and genus. I shall therefore proceed at once to discuss the species.

Family, MONAULIDÆ, Hertwig.

Scytophorus, n. gen.1

Scytophorus striatus, n. sp. (Pl. III. fig. 6; Pl. XIII. figs. 1, 3, 8). Sessile Monaulidæ with seven pairs of septa and fourteen longitudinal furrows on the

1 axitoc=leather.